



United States  
Environmental Protection  
Agency

Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604

Illinois, Indiana,  
Michigan, Minnesota,  
Ohio, Wisconsin

# Environmental NEWS RELEASE



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(312) 886-7568

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(312) 353-6196

For Immediate Release: September 6, 1996

No. 96-OPA181

## EPA TO HOLD MEETING ON CLEANUP OF EKCO HOUSEWARES SITE SEPT. 10

U.S. Environmental Protection Agency (EPA) Region 5 will hold a public meeting to discuss and hear comments on the proposed cleanup plan for the Ekco Housewares site, Massillon, OH. The meeting will be held from 7 to 9 p.m., September 10, Massillon Municipal Center, 1 James Duncan Plaza.

The plan includes removing contaminants from the soil through vapor extraction; installing a ground-water extraction, treatment, and monitoring system; injecting air into ground water to help recover the contaminants; and restricting the drinking of ground water.

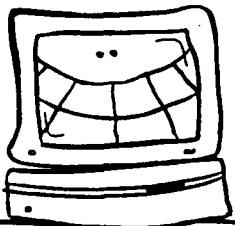
Written comments--postmarked by September 26, 1996--should be sent to: Cheryl L. Allen, Office of Public Affairs (P-19J), U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, IL 60604.

Comments may also be sent through e-mail to: [allen.cheryl@epamail.epa.gov](mailto:allen.cheryl@epamail.epa.gov).

For more information, call EPA at 800-621-8431. Site-related documents can be reviewed at the Massillon Public Library, 208 Lincoln Way East.

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### Our news releases direct to your computer!



Tired of waiting on the post office? If you would like to have all Region 5 news releases sent to you via e-mail, all you have to do is send a message to [listserv@unbmail.rtpnc.epa.gov](mailto:listserv@unbmail.rtpnc.epa.gov). The body of the message should be "subscribe EPARegion5News your\_first\_name your\_last\_name." You will receive an e-mail confirmation when you've been added to the list (it may take several hours, be patient).

Region 5's news releases are also available on the World Wide Web. Just point your browser at <http://www.epa.gov/Region5/epanews.html>.

If you have any questions about getting Region 5 news releases electronically, please call Jeff Kelley at (312) 353-1159.

## FOR MORE INFORMATION

If you would like more information about the Ekco facility or have questions, please contact one of the following EPA representatives:



Bob Smith  
Project Manager  
U.S. Environmental Protection  
Agency, Region 5 (DRE-8J)  
77 W. Jackson Blvd.  
Chicago, IL 60604  
(312) 886-7568

Cheryl Allen  
Community Involvement Coordinator  
U.S. Environmental Protection  
Agency, Region 5 (P-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604  
(312) 353-6196

Toll free no.: 1-800-621-8431

The administrative record, a record of all the information used or considered in making cleanup decisions at the Ekco facility, including the RFI and CMS reports and the Statement of Basis, is available for public review at the following location:

Massillon Public Library  
208 Lincoln Way East  
Massillon, OH 44648  
(216) 832-9831



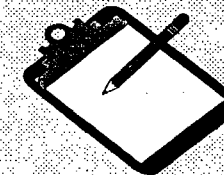
United States Environmental Protection Agency  
Region 5  
Waste, Pesticides, and Toxics Division  
77 West Jackson Boulevard (DRE-8J)  
Chicago, IL 60604-3590

ADDRESS CORRECTION REQUESTED



### THIS FACT SHEET DISCUSSES THE FOLLOWING:

- The history of the Ekco Housewares, Inc., facility
- Investigations conducted at the facility
- Potential health risks posed by facility contamination
- The proposed cleanup plan
- Public participation in selecting a cleanup remedy
- More information



### PUBLIC COMMENT PERIOD

Before selecting a final cleanup remedy for the Ekco facility, EPA is soliciting input from the community on all of the cleanup alternatives evaluated as well as its proposed cleanup plan. **EPA has set a public comment period from August 26 - September 26, 1996**, to give the public an opportunity to submit formal comments and participate in the cleanup selection process. Written comments can be submitted to EPA at the addresses listed on the last page of this fact sheet or you can use the comment sheet on Pages 5 and 6 to record your comments.

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## EPA PROPOSES A CLEANUP PLAN FOR CONTAMINATION AT EKCO HOUSEWARES, INC.

Massillon, Stark County, Ohio

September 1996

### INTRODUCTION

This fact sheet presents the U.S. Environmental Protection Agency's (EPA) proposed remedy for cleaning up contaminated soil and groundwater at the Ekco Housewares, Inc. (Ekco), facility in Massillon, Ohio. It also briefly discusses other alternatives considered for facility cleanup and explains the reasons for selecting the proposed remedy. EPA will select a cleanup plan for the Ekco facility only after the public is given the opportunity to comment on the proposed cleanup plan and all other cleanup alternatives considered for the facility.

This fact sheet is based on information obtained from a public document called a "Statement of Basis," which EPA requires to be prepared to fulfill public participation requirements under Section 3008(h) of the **Resource Conservation and Recovery Act (RCRA)**. (Words in **boldface** are defined in the glossary on Page 7.) The Statement of Basis summarizes environmental investigation reports prepared for the Ekco facility that are available for public review along with other facility-related documents in the **administrative record**, which is located at the address listed on the last page of this fact sheet. EPA encourages the public to review these documents to gain a better understanding of the Ekco facility and activities that have been conducted there.

EPA believes that the proposed cleanup plan described on Page 4 of this fact sheet and in greater detail in the Statement of Basis will best protect public health and the environment.

At this point, the cleanup plan is just a proposal. *The public is encouraged to take part in the cleanup plan selection process by submitting comments to EPA during a public comment period to be held from August 26 to September 26, 1996.* EPA may modify the proposed cleanup plan or select another plan based on new information or public comments.

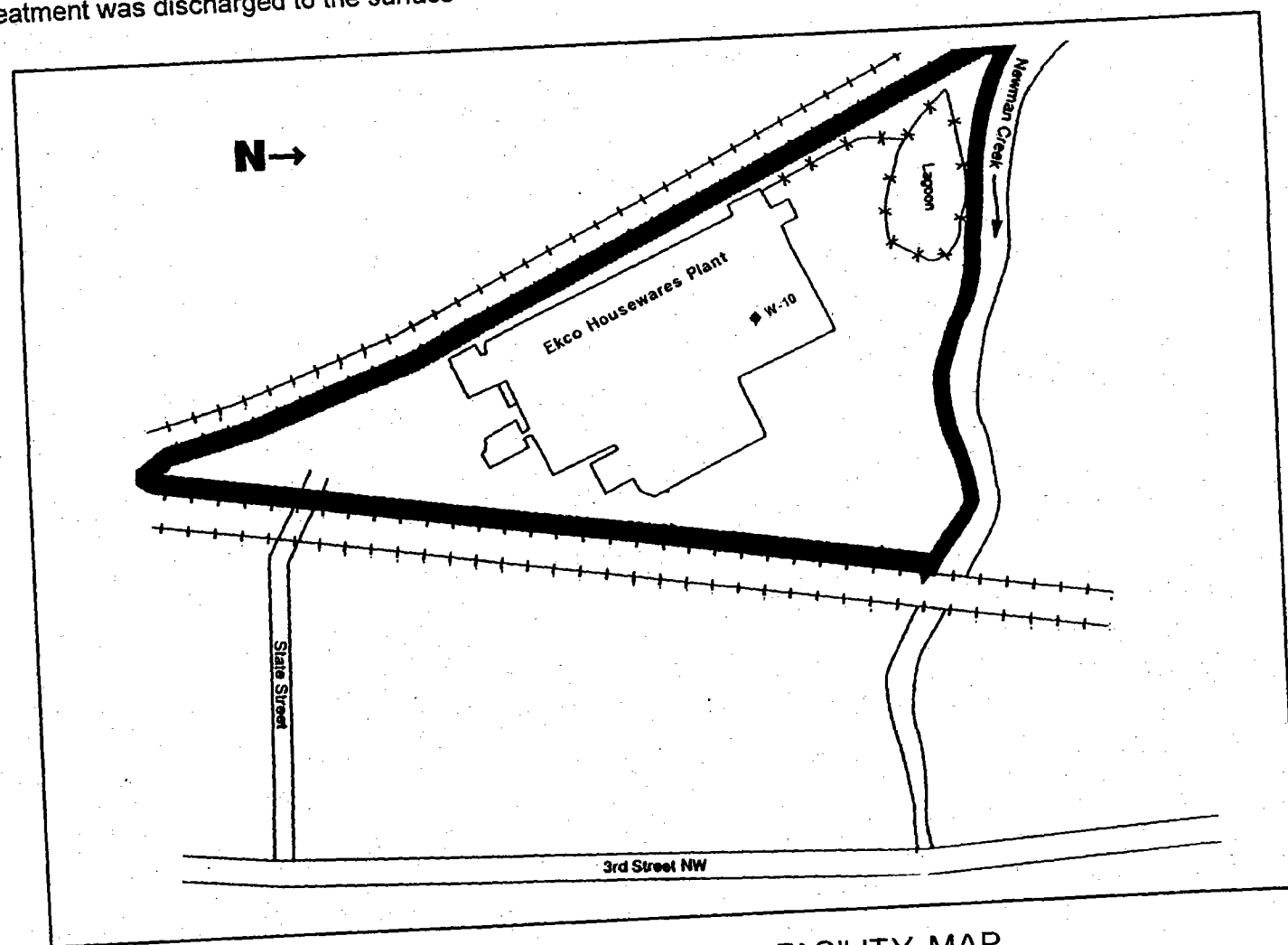
## FACILITY HISTORY

The Ekco facility is located on approximately 13 acres in Massillon, Stark County, Ohio. The area surrounding the facility is largely urban and industrial. The Ekco property lies an estimated 1,500 feet west of the Tuscarawas River and is bordered to the north by Newman Creek and to the south, east, and west by railroad tracks. A map of the facility is shown below.

In the 1940's, the Ekco facility manufactured aluminum and stainless steel cookware. By 1951, the facility was also manufacturing shell casings for the military. Increased production led to the drilling of two production wells at the facility. In 1953, Ekco installed a sewer to carry plant waste to a discharge point along Newman Creek and also constructed a lagoon (surface impoundment) adjacent to the creek. Waste associated with plant activities and sludge from waste treatment was discharged to the surface

impoundment. The surface impoundment was used from 1953 to 1977 and from 1980 to 1984. In 1954, Ekco began coating the cookware manufactured at the facility. From 1954 to 1960, Ekco used solvents, which contained **volatile organic compounds (VOCs)**, in the cleaning process prior to coating. Porcelain and Teflon coating units were installed in 1976. In 1980, Ekco again began to use a solvent which contained VOCs for cleaning and continues to use it today.

Between 1979 and 1980, a major solvent spill occurred at the facility. The quantity, location, and extent of the spill was not documented. In 1992, a 50-gallon spill was reported to have occurred in the west side of the facility. In 1984, water in the production wells was sampled and analyzed. VOCs were detected in the groundwater samples, indicating that VOCs had migrated from soil into groundwater.



EKCO HOUSEWARES, INC., FACILITY MAP

## ENVIRONMENTAL INVESTIGATIONS

Ekco began an environmental investigation in 1984. Soil and water samples were collected from seven locations around the facility. Samples contained various concentrations of VOCs. To control migration of the VOCs and remediate groundwater, a **pump-and-treat** program was initiated at production well W-10. An **air stripping** system was installed to treat the groundwater recovered from well W-10.

In June 1986, Ekco began development of a preliminary closure plan for the lagoon. In September 1987, a groundwater quality assessment was conducted to collect baseline information and determine the need for interim cleanup measures at the facility. VOCs were detected in groundwater samples from on-site **monitoring wells** installed in both shallow soils and **bedrock**. A groundwater quality assessment program was started in 1988 to

evaluate groundwater conditions at the facility.

In 1989, EPA and Ekco signed a **consent agreement** under which Ekco agreed to conduct a **RCRA facility investigation (RFI)**. RFI field activities began in April 1991 and included groundwater, surface water, soil, and soil gas sampling. RFI results indicate that the main sources of VOC contamination are located near well W-10 and the tank area north of the facility. On-site groundwater is contaminated and has migrated off site beyond the north and east Ekco property boundaries. An estimated 3,500 cubic yards of contaminated soil is located under the facility building, and 4,900 cubic yards of contaminated soil is located outside the building on the facility property. Based on information gathered during the RFI, Ekco conducted a **corrective measures study (CMS)** to identify and evaluate alternatives for cleaning up facility contamination.

## HEALTH RISKS

part of the CMS, a study called a "baseline risk assessment" was conducted to determine potential risks to human health and the environment posed by contamination at the Ekco facility based on its present condition. Specifically, the study assesses health risks to people who might live on the Ekco property in the future if groundwater or soil contamination is not remediated and the existing groundwater pump-and-treat system is no longer used. Health risks were evaluated based on exposure to VOCs present in groundwater in the shallow and intermediate portions of the bedrock (the upper groundwater unit) and the lower portion of the bedrock (the lower groundwater unit).

The baseline risk assessment evaluated two types of human health risks: carcinogenic risks and noncarcinogenic risks. Carcinogenic risk is expressed in terms of the increased likelihood that additional cases of cancer could potentially develop in a population as a result of exposure to cancer-causing contaminants over a lifetime. Noncarcinogenic risk is expressed in terms of whether adverse health effects other than cancer could potentially be caused by exposure to contaminants.

Overall, the greatest risks posed by the Ekco facility would result from residents drinking groundwater and breathing in contaminants while showering in groundwater. The results of the baseline risk assessment show that VOCs present in the upper groundwater unit at the Ekco facility pose a lifetime cancer risk of  $1 \times 10^{-2}$ , meaning that the potential exists for 1 future resident at the Ekco property out of 100 to develop cancer as a result of exposure to contaminants in the upper groundwater unit if no cleanup measures are taken at the facility. The assessment also showed that the potential exists for 1 future resident out of 1,000 to develop cancer (expressed as a risk of  $1 \times 10^{-3}$ ) as a result of exposure to contaminants in the groundwater unit if no cleanup measures are taken. In addition, the risk assessment showed that exposure to contaminants in the upper and lower groundwater units would pose potential noncancer health risks as well.

In accordance with EPA and federal law requirements, cleanup actions must be taken at sites or facilities that pose potential cancer risks of greater than 1 in 10,000 (expressed as  $1 \times 10^{-4}$ ) or that pose potential adverse noncancer risks. Therefore, cleanup actions are required at the Ekco facility.

## THE PROPOSED CLEANUP PLAN

RFI results show that soil and groundwater contaminated with VOCs at the Ekco facility should be cleaned up. A number of alternatives were identified and evaluated for cleaning up soil and groundwater contamination during the CMS. All of the alternatives are described and compared in detail in the CMS report, which is available for review at the location listed on the last page of this fact sheet.

Based on the CMS, EPA has identified the alternative that it believes is best for cleaning up VOCs at the facility. The proposed cleanup alternative includes measures for cleaning up groundwater and two areas of soil at the facility beneath and outside the facility building. The proposed alternative consists of the components discussed below.

VOCs in groundwater would be removed by a process called "air sparging" (AS), also known as "in situ air stripping." AS is an effective option for treating groundwater contaminated with VOCs. The process basically transfers VOCs, which evaporate easily when exposed to air, from a liquid to a vapor phase. A system of injection wells injects air into groundwater. VOCs are dissolved in the groundwater volatilize into the air as air bubbles. **Soil vapor extraction (SVE)** wells are then used to collect vapor-phase VOCs as they migrate upward through the soil subsurface. Once contaminated vapors are removed from the soil subsurface, they are treated using a vapor treatment system. At the Ekco facility, the vapor would be treated with **granular activated carbon (GAC)** filters.

The air stripping system currently being used at the facility would continue to be operated to provide further groundwater treatment. Groundwater would be monitored to ensure the effectiveness of treatment. Well permit restrictions would be placed on the property to restrict the placement of drinking wells in the area of the contaminated groundwater.

VOC-contaminated soil both beneath and outside the Ekco building would be treated by an SVE system to remove VOCs using the same process described above. Air injection vents and recovery vents would be installed in each contaminated soil area. The removed VOCs would be treated using GAC, if necessary.

The total estimated cost for treating contaminated groundwater is \$3,259,700. The total estimated costs for treating contaminated soil is \$771,000 for treating soil beneath the facility building and \$1,340,000 for treating soil outside the building.

Objectives for cleanup at the Ekco facility include (1) meeting regulatory standards for VOCs detected in all groundwater zones at the facility, (2) continuing the prevention of contaminant migration from the facility property, and (3) meeting regulatory standards for VOCs detected in soil. The recommended alternative would successfully meet all of these objectives.

Before selecting a final cleanup remedy for the Ekco facility, EPA is soliciting input from the community on all of the cleanup alternatives evaluated in the CMS as well as on its proposed cleanup plan. ***EPA has set a public comment period from August 26 through September 26, 1996, to give the public an opportunity to submit formal comments and participate in the cleanup selection process.*** Written comments can be submitted to EPA at the addresses listed on the last page. After consideration of the comments received, EPA will select the final cleanup plan and document the selection in a document called a "Response to Comments (RTC)", which will be available to the public at the location listed on the last page. Public comments will be summarized in the RTC.

Our input on the proposed cleanup plan and all of the cleanup alternatives considered for the Ekco Housewares, Inc., facility is important. The U.S. Environmental Protection Agency (EPA) will carefully consider all comments provided by the public during the public comment period.

Use the space below to write your comments, and then tear out, fold, and mail this sheet. **Comments must be postmarked by September 26, 1996.** If you have questions about the public comment period, please contact Cheryl Allen at the telephone number listed on the last page of this fact sheet.

[illegible]

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone No. ( ) \_\_\_\_\_

## PUBLIC COMMENT SHEET

### GLOSSARY

**Administrative record:** A file that is maintained and contains all information used by the lead agency to make its decision on the selection of a response action. The file is available for public review.

**Air stripping:** A treatment system that removes, or strips, volatile organic compounds (VOC) from contaminated groundwater or surface water by forcing an air stream through the water and causing the VOCs to evaporate.

**Bedrock:** A term applied to solid rock underlying soil.

**Consent agreement:** A legal agreement between the U.S. Environmental Protection Agency (EPA) and the party potentially responsible for contaminating a site or facility whereby the party agrees to perform or pay the cost of a site or facility cleanup. This agreement describes actions to be taken at the site or facility and may be subject to a public comment period.

**Corrective measures study (CMS):** A study that develops and evaluates alternatives for addressing contamination at a RCRA facility.

**Granular activated carbon:** A treated material that attracts VOCs.

**In situ:** A term meaning "in place." An in situ treatment system treats material in place without requiring excavation, removal, or transport.

**Migration:** The uncontrolled movement of a contaminant or contaminants from one location to another.

**Monitoring wells:** A special well drilled at a specific location on or off a hazardous waste site from which groundwater can be sampled at selected depths to determine the direction of groundwater flow and the types and amounts of contaminants present in groundwater.

**Resource Conservation and Recovery Act (RCRA):** A federal law that established a regulatory system to track hazardous wastes from the time they are generated to the time they are disposed. The law requires that safe and secure procedures be used to treat, transport, store, and dispose of hazardous wastes. RCRA is designed to prevent the creation of new, uncontrolled hazardous waste sites.

**RCRA facility investigation (RFI):** An investigation that evaluates the nature and extent of releases of hazardous waste and hazardous constituents at a facility and that gathers necessary data to support the corrective measures study and interim protective measures.

**Surface impoundment:** A pond used to treat, store, or dispose of liquid hazardous wastes.

**Volatile organic compound:** An organic (carbon-containing) compound that evaporates readily at room temperature.

Fold on Dashed Lines, Staple, Stamp, and Mail

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Zip \_\_\_\_\_

Place  
Stamp  
Here

Cheryl Allen  
Community Involvement Coordinator  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard (P-19J)  
Chicago, IL 60604



U.S. EPA HEARING

- - -

IN RE: EPA PROPOSES A CLEANUP PLAN FOR CONTAMINATION AT  
EKCO HOUSEWARES, INC.

- - -

Tuesday, September 10, 1996,  
7:05 o'clock, p.m.,  
Massillon Municipal Gov't Center,  
Massillon, Ohio.

- - -

IN ATTENDANCE:

U.S. Environmental Protection Agency;

By: Robert Smith, Project Manager,  
and  
Cheryl L. Allen, Community Involvement  
Coordinator,  
Region V,  
Office of Public Affairs (P-195),  
77 West Jackson,  
Chicago, IL 60604.

- - -

## P R O C E E D I N G S

- - -

MS. ALLEN: I would like to thank you all for coming. I'm Cheryl Allen, the Community Involvement Coordinator with USEPA. This is Bob Smith. He's the Project Manager with USEPA, and I want to thank you for coming out this evening.

We're here to get the comments on the proposed cleanup for Ekco Housewares. Now we started the comment period on August 26 and it concludes on September 26, so that's the purpose of tonight's meeting is to get verbal comments from you on the proposed plan cleanup which is summarized in this Fact Sheet.

Now the huge document is how many pages, Bob?

MR. SMITH: About 30 pages.

MS. ALLEN: About 30 pages is located in the Information Repository at the library here in town, so if you want to go and peruse that and look at the charts and graphs and everything, feel free to be welcome to do that.

Like I said, we have -- this is the

1 comment period for this site, and for those  
2 purposes, we have a Court Reporter here who is  
3 going to be taking down all of your questions  
4 and your comments, and we encourage you to  
5 bring forth as many questions and comments you  
6 can think of this evening. That's the purpose  
7 of this meeting is to get any questions or  
8 comments out that you have about the proposed  
9 plan or any of the other alternatives that are  
10 listed in the Statement of Basis.

11 After we get all the comments in the mail  
12 and through this meeting and I get --  
13 sometimes I get comments through E-Mail, I get  
14 comments over the phone, we take all those  
15 comments and compile them into what is called  
16 a -- this is a little different because I work  
17 in the Superfund and their documents are  
18 different, their document is called Response  
19 to Comments, and once we get all that compiled  
20 and answer all your questions, we'll put that  
21 in the information Repository also.

22 So with that, I'm going to introduce Bob  
23 and he's going to go through all the  
24 alternatives, talk about the Statement of  
25 Basis, then we're going to open up to



1 questions, and after that we're going to open  
2 up to comments, so with that, Bob.

3 MR. SMITH: I'm Robert Smith. I am the  
4 new Project Manager for this site, and I'll be  
5 taking this project through the Statement of  
6 Basis, through the final decision, into the  
7 corrective measures implementation which would  
8 be the actual site of remediation, and so at  
9 this point what I'd like to do is pretty much  
10 briefly discuss what is found in the Statement  
11 of Basis, explain some of the ideas of what's  
12 behind it, a little bit of background,  
13 including what USEPA did at the site, and what  
14 this document, the proposed Statement of  
15 Basis, is, where we're going from here after  
16 tonight and so forth.

17 One thing I'd like to say is that the  
18 Repository, while it's supplied with two  
19 copies of the Statement of Basis, that did not  
20 have the figures in it and I corrected that  
21 problem, so if any of you have gone to the  
22 library before tonight, you may want to  
23 revisit it because those Statement of Bases  
24 now have the correct diagrams and maps  
25 included.

1           What we have now is this document called  
2           the Proposed Statement of Basis, and basically  
3           it is the conclusions of our Corrective  
4           Measure Study. Much of this I'll get into in  
5           a little bit more detail, but what we're doing  
6           is proposing a cleanup at the Ekco facility,  
7           and, again, what we're doing tonight is  
8           presenting this to the public and allowing you  
9           to give your comments or have a chance to ask  
10          questions about this cleanup or what we've  
11          done out there, and the comment period will  
12          extend beyond tonight if there's any written  
13          comment or telephone comment, fax comment,  
14          whatever, and what we will do is review the  
15          comments, and then if there's any major  
16          questions or maybe comments -- well, we're  
17          going to answer every single one of them, but  
18          if there's something that will change our  
19          proposal, well then that's something we'll be  
20          considering. So what we're proposing tonight  
21          is not the final selected remedy, but it's our  
22          proposal.

23                 Briefly to start out, our proposed remedy  
24                 is found in this Fact Sheet that's presented  
25                 up here, and if you each have a copy of the

1 Fact Sheet, there's also a stack of maps and  
2 diagrams that were rather helpful to look at  
3 while we're talking about this, but to get in  
4 your mind before we go through all the more  
5 detailed information, the remedy consists of  
6 air sparging and groundwater extraction and  
7 treatment, groundwater monitoring, well  
8 permanent restrictions and soil vapor  
9 extraction. This certainly may not mean  
10 anything to you at this point, but we'll be  
11 going through this in a little bit more detail  
12 hopefully that you'll understand it, and if  
13 not, you know, you'll have the opportunity to  
14 ask questions about this.

15 The first map that I included on this is  
16 the map of the facility. It's about 13 acres,  
17 and it's located in a largely urban and  
18 industrial area, and there's marked rural  
19 areas and large portions of open space to the  
20 northwest. It's about 1,500 feet west of the  
21 Tuscarawas River, and it is bordered by two  
22 sides by railroad tracks and bordered to the  
23 north by Newman Creek.

24 The facility started in 1940 manufacturing  
25 aluminum and stainless steel cookware, and it

1 made shell casings for the Military during  
2 World War II. During this time, there was a  
3 surface impoundment that was operated at the  
4 facility, and the surface impoundment  
5 generally is the lagoon in which waste is  
6 placed for either disposal or treatment.

7 In 1954 Ekco began coating cookware  
8 manufactured at the facility, and from 1954 to  
9 1960 Ekco used solvents, primarily  
10 Trichloroethene, which is abbreviated TCE, or  
11 1,1,1-Trichloroethene, which is abbreviated  
12 1,1,1-TCA, and they used these solvents in  
13 their cleaning process prior to the coating.

14 And between 1979 and 1980 a major solvent  
15 spill of unknown quantity occurred near the  
16 process water well which is Well 10. That's  
17 also found in Map No. 3. Neither the exact  
18 location or the extent of the spill was  
19 documented.

20 A second spill of 50 gallons of 1,1,1-TCA  
21 was reported to have occurred in 1992 on the  
22 west side of the building. In 1984, an  
23 analysis of on-site water well was conducted  
24 for volatile organic compounds which is  
25 abbreviated VOC. The results indicated in the

1 presence of TCE and 1,1,1-TCA found in the  
2 groundwater, and I have maps which -- probably  
3 about Maps 5 through 7 which show generally  
4 some of the groundwater contamination, the  
5 location, and some of the big concentrations.  
6 The findings were that the VOC were detected  
7 in shallow intermediate and bedrock monitoring  
8 wells, that a nearby municipal well was  
9 contaminated, and the VOC source area was  
10 identified in four locations such as the areas  
11 in the southwestern end of the plant, the tank  
12 area at the northern end of the plant and in  
13 the sump at the production well.

14 Then in 1989, USEPA and Ekco signed a  
15 Consent Agreement which is an administrative  
16 order of consent under 3008H of the Resource  
17 Conservation and Recovery Act, which is called  
18 RCRA is our acronym for that program. It  
19 required a RCRA facility investigation which  
20 is an investigation where we go out to the  
21 site to try to delineate contamination, to try  
22 to find rate and extent of contamination, and  
23 what the contaminants are and required  
24 Corrective Measure Study. Once the extent of  
25 the contamination is found, we look through

1 the possible remedial actions that can be  
2 taken at the site to take care of the problem.  
3 Field work started in April of 1991, and the  
4 final R5 report was approved in 1993, and by  
5 March, 1994, the Corrective Measures Study was  
6 finalized and approved, and the contents of  
7 the Statement of Basis, which is found in the  
8 Repository, documents and summarizes the  
9 Corrective Measure Study.

10 And just before we go into some of the  
11 other findings of the facility investigation,  
12 part of the investigation included the  
13 definition of the environmental setting which  
14 includes Geology and the hydrogeology. As far  
15 as the Geology is concerned, the Ekco facility  
16 is found on a western flank of a buried  
17 glacial valley and the valley is filled with  
18 glacial sediments. On the western end of the  
19 facility, the glacial sediments are only 20  
20 feet thick, and on the eastern portion of the  
21 site, the glacial sediments extend greater  
22 than 250 feet in thickness. The glacial  
23 sediments are divided into seven distinct  
24 layers of unconsolidated material and three  
25 highly permeable sand and gravel units are

1 found in the glacial units.

2 Below the glacial sediments are bedrock  
3 and the bedrock consists of four interbedded  
4 layers, most importantly sandstone unit, which  
5 is primarily the water-bearing unit in the  
6 bedrock. The rock units are divided into four  
7 distinct permeable hydrostat graphic units  
8 which include the shallow sand and gravel, the  
9 intermediate sand and gravel, the deep sand  
10 and gravel, and sandstone bedrock.

11 Ekco uses two sandstone bedrock production  
12 wells which are wells W-1 and W-10 and they  
13 pump a total of approximately 600 gallons per  
14 minute to provide water for the manufacturing  
15 facility. The Ohio well service pumps the  
16 three production wells intermittently from  
17 deep sand and gravel up to 2800 gallons a  
18 minute to provide water to the City of  
19 Massillon.

20 Generally, the RCRA facility  
21 investigation, RFI, concluded that the main  
22 sources of the VOC contamination are located  
23 at recovery well W-10, the tank area north of  
24 the building, and groundwater on the site is  
25 contaminated, and the groundwater



1 contamination has migrated off site. It's  
2 estimated that 3,500 cubic yards of soil  
3 contamination exists under the buildings and  
4 4,899 cubic yards of contamination exists  
5 outside of the building on the property. Our  
6 going around and monitoring has demonstrated  
7 that the groundwater adjacent to the facility  
8 has been contaminated with VOCs from the  
9 chlorinated ethene family and chlorinated  
10 ethane family. Members of both these groups  
11 break down the environment through inorganic  
12 deep chlorination and other mechanisms to  
13 create successively lighter compounds.  
14 Groundwater contamination is found in the  
15 shallow intermediate and bedrock water bearing  
16 zones.

17 Once the site was characterized, the data  
18 are presented and interpreted, and then the  
19 Corrective Measure Study or CMS is performed,  
20 and as I stated, the CMS is when we look  
21 through all the potential corrective measures,  
22 study them, and based on the site, the  
23 contamination, the Geology, so forth, we  
24 propose corrective measures for the facility,  
25 but, also, part of the Corrective Measure

1 Study includes a risk assessment, and the risk  
2 assessment defines risk to human health in the  
3 environment, and the purpose of this risk  
4 assessment was to determine the present and  
5 future potential risks to public health in the  
6 environment posed by the facility based on  
7 existing conditions. The objective was to  
8 assess health risks to a hypothetical future  
9 on-site resident from exposure to the VOCs in  
10 the upper and lower bedrock units. The  
11 baseline risk assessment evaluated potential  
12 risk of human health giving no action in  
13 remediated groundwater or soil at the  
14 facility, that is cessation of the testing  
15 groundwater pump program, and this would be a  
16 worse case scenario.

17 The chemical constituents of concern at  
18 this facility consist of carcinogenic and  
19 noncarcinogenic compounds found in the  
20 groundwater. And the sum of the potential  
21 risk for carcinogen indicated the following  
22 cumulative risk for exposure to carcinogens or  
23 noncarcinogens under worst case exposure  
24 scenarios, and that is worst cases one times  
25 ten negative two, which is one in a hundred

1 risk of getting cancer in the shallow or the  
2 intermediate bedrock unit, and one times ten  
3 in the negative third, which is one in a  
4 thousand in the lower bedrock unit. For both  
5 cancer and noncancer risk, the largest  
6 contributor is by chemicals TCE, 1,1,1-DCE,  
7 and vinyl chloride.

8 For the Ekco facility, immediate cleanup  
9 standards have been established which  
10 corresponds to maximum contaminant levels or  
11 MCLs. MCLs are federally enforceable drinking  
12 water standards developed in the Safe Drinking  
13 Water Act and this is 40CFR141, Subpart B.

14 In the contaminants found in the  
15 groundwater above, the respective of MCLs were  
16 PCE, TCE, 1,1-DCE, 1,2-DCE, vinyl chloride and  
17 1,1,1-TCA, and these are initial contaminants  
18 released to the environment under breakdown.  
19 Of course, they have long chemical names  
20 for -- I don't know if everybody here has a  
21 scientific background or whatever, but it's  
22 easier to go through the abbreviations.

23 So the conclusions were that the  
24 contaminated soils that needed to be  
25 remediated fall in the two categories, the

1 soils underneath the Ekco Manufacturing  
2 building and soils outside the building. The  
3 contaminants of concern for the soils are TCE  
4 and 1,2-DCE. The estimated amount of soil to  
5 be remediated beneath the building is 3,500  
6 cubic yards of VOC contaminated soil, and the  
7 soil outside of the building that needs to be  
8 remediated is estimated at 4,900 cubic yards  
9 of VOC contaminated soil, and the calculated  
10 soil cleanup levels for those two contaminants  
11 are for TCE, one milligram per kilogram, which  
12 is one part per million, and for 1,2-DCE is  
13 ten milligrams per kilogram, which is ten  
14 parts per million.

15 The Statement of Basis includes a summary  
16 of the alternatives. There are quite a few  
17 alternatives here. For the groundwater, there  
18 are six alternatives. For the inside soil,  
19 which would be below the building, there are  
20 three alternatives. For the outside soil,  
21 there are six alternatives. I feel that it's  
22 probably best to look at the document in the  
23 library because if I were to go through this,  
24 it would just turn into a college lecture, and  
25 I'm sure everybody's eyes would start glazing

1 over pretty quick, but what I'd like to do is  
2 go through, in simple terms, our evaluation of  
3 the proposed remedy, and then give you our  
4 proposed remedy. And if you'd like to have a  
5 lot more detail, then, again, go to the public  
6 library and look through the documents. If  
7 you have any questions, I will provide my  
8 phone number.

9 When we take a look at the alternatives,  
10 there are five criteria that we use to  
11 evaluate the alternatives. The first one is a  
12 technical criteria. In simple terms, it's  
13 just performance evaluation, how effective is  
14 the remedial action? Does it meet our  
15 objectives of cleanup?

16 Our human health criteria is number two.  
17 We want to mitigate human exposure. What is  
18 the risk of human exposure to the  
19 contamination?

20 Our third one is environmental criteria.  
21 We want to eliminate any release to the  
22 environment, clean it up, remove it, treat it,  
23 whatever the case may be. So that there won't  
24 be a continuous release to the environment,  
25 clean it up once and for all.

1 Institutional criteria is number four.  
2 Basically that's State, Federal, local laws,  
3 public health standards, statutes, and  
4 basically it can be as simple as putting up a  
5 fence or looking at what the State of Ohio  
6 requires or what the Federal Government  
7 requires.

8 The fifth one, and for my program the  
9 Resource Conservation Recovery Act, RCRA, we  
10 don't look at it in the same light as  
11 Superfund does, and that's cost estimate. For  
12 us, we look at the cost estimate, but it's  
13 mostly important if there's two or more  
14 alternatives and you get to the same end  
15 point, and if one is significantly cheaper  
16 than another, then we go with the cheaper one.  
17 In the Superfund, it's quite a bit different,  
18 but we do look at the cost estimate, and if  
19 relevant to our program, it plays a part.

20 So finally we get to our proposed remedy.  
21 Our proposed remedy, which is found in the  
22 Statement of Basis, USEPA is proposing  
23 alternative groundwater No. 6, GW-6, as our  
24 choice. That includes air sparging of shallow  
25 zone and pulse pumping of W-1 and W-10,

1 groundwater recovery, air stripping and  
2 groundwater monitoring. The air sparging of  
3 the channel zone and pulse pumping of W-1 and  
4 W-10, groundwater recovery, air stripping and  
5 groundwater monitoring would include the  
6 installation of additional recovery walls and  
7 pulse pumping of the existing bedrock units.  
8 Contaminated bedrock groundwater would be  
9 recovered from using W-1 and W-10, and part of  
10 that is discussed in alternative GW, the  
11 specifics of the pulse pumping. And for this  
12 alternative, air sparging will be implemented  
13 in conjunction with soil. The remedial action  
14 is described in alternative OS3.

15 Air sparging. You're probably asking  
16 yourself "What's air sparging?" It's a  
17 technology that mechanically introduces air  
18 below the water table using compressed air to  
19 feed a series of injection wells. VOCs that  
20 are dissolved in the groundwater volatilizes  
21 into the air as the air bubbles move through  
22 the groundwater, and the VOC laden air stream  
23 is then collected from the vadose zone, which  
24 is the zone above the water table using the  
25 soil vapor extraction system, which is SVE.



1           One thing that's not mentioned in the  
2           Statement of Basis, though, is that, you know,  
3           the introduction of air also aided in some  
4           sort of biodegradation, but that's kind of an  
5           add and plus, but, anyway, this alternative  
6           proposes that the operation of the air  
7           stripper would continue without modification.  
8           There's an air stripper working at the site at  
9           this time, and the air sparging is estimated  
10          to be performed for two years. Groundwater  
11          well permits and usage would be restricted in  
12          this area the pulse pumping of W-1 and W-10.

13          As far as remediation of sites is  
14          concerned, we've been doing this for a while  
15          and we've been looking at the results of  
16          continuous pumping or pulse pumping for  
17          certain ways to try to get as much  
18          contamination out of the ground as possible,  
19          and it appears that pulse pumping works  
20          probably better than continuous pumping, so  
21          that basically means pumping for a while in  
22          the well, letting it recover, and then pump  
23          again, and it seems that more contaminants are  
24          extracted from the ground using that  
25          particular method.

1           So this proposed remedy we feel will  
2           achieve our regulatory standards, which are  
3           the MCL, for organics found on all site  
4           aquifers and would continue the prevention of  
5           migration of contamination from the site and  
6           would achieve regulatory standards which are  
7           MCLs for organics found in any portion of the  
8           deep sand and gravel layer which serves the  
9           adjacent Ohio service wells.

10           The duration for this would be 30 years,  
11           maybe even longer, for everything except the  
12           air sparging, which is expected to be  
13           completed in two years. The capital cost is  
14           about \$235,000. The annual operation of  
15           maintenance would be about 185,000 for the  
16           first and second year and then will go down to  
17           approximately \$98,000 per year, and the total  
18           cost over the life would be \$3,259,000.

19           For the inside soil which is found beneath  
20           the facility, alternative IS2, soil vapor  
21           extraction, SVE, treatment is proposed, and  
22           this alternative would consist of the  
23           installation of the soil vapor extraction  
24           system that would remove VOCs from the soil  
25           underneath the northeast corner of the

1 building. The SVE removes the VOCs from the  
2 soil by mechanically drawing air through soil  
3 pore spaces. Air injection vents and vertical  
4 or horizontal recovery vents would be  
5 installed into the soil through the floor of  
6 the building. The volatilized VOCs would then  
7 be removed and treated using granular  
8 activated carbons, if necessary. The pilot  
9 system will be installed. An additional soil  
10 borings will be completed to determine the  
11 scale of the system in the area beneath the  
12 northeastern corner of the plant and to find  
13 the placement of the air vents for a full  
14 scale system, and that's possibly a one-year  
15 duration. Capital cost, about 524,000.  
16 Annual operation of the maintenance cost,  
17 about 228,000, plus a one-time charge of  
18 \$19,000 for confirmatory sampling. A total  
19 cost projected to be \$771,000.

20 For the outside soils, alternative OS3,  
21 which is soil vapor extraction, is proposed,  
22 and this alternative would involve the  
23 installation of an SVE system that would  
24 remove VOCs from the various areas of soil  
25 contamination outside the building, air

1 injection vents, and a combination of vertical  
2 and horizontal recovery vents would then be  
3 installed in each area. To remove the VOCs  
4 would be treated using granular activated  
5 carbon, if necessary, and a pilot system would  
6 be installed, and additional soil borings  
7 would be completed in the various areas  
8 outside the building to define the placement  
9 of vents. The duration is probably one year.  
10 Capital cost, 762,000; annual operation of  
11 maintenance would be about 552,000, plus a  
12 one-time sampling charge of about \$26,000.  
13 Total cost would be \$1,340,000.

14 Where we go from this point would be to  
15 take any and all comments generated this  
16 evening or during the duration of the comment  
17 period. Depending on what the comments are  
18 and how it affects our proposed remedy, you  
19 know, we will either modify or change as  
20 needed our proposed plan, our proposed  
21 remedial plan. The next step would be that I  
22 would write a final decision based on the  
23 Statement of Basis and comments and conclude a  
24 Response to Comments. From that point, we  
25 would go into negotiations with Ekco and have,

1           you know, a new order for the corrective  
2           measures implementation, and by all  
3           appearances and all parties needed to go into  
4           this, to finally take care of the site and  
5           move forward.

6           Once again, the library does have the  
7           Statement of Basis, and if you'd like to look  
8           at it in a little more detail, it's located in  
9           the public library and we do have a few more  
10          weeks to provide comments once you look  
11          through that and maybe study the situation a  
12          little more.

13          MS. ALLEN: My foot went to sleep so I'm  
14          not going to stand, I don't want to fall.

15          We're going to open it up to questions  
16          now, and after we take a few questions, we're  
17          going to take a break and then open up to  
18          comments.

19          Now during the comment portion, it's  
20          strictly comments. We're not allowed to  
21          answer you, that's just the comment portion,  
22          but if you want to ask a question during the  
23          comment portion, it would be addressed, so  
24          we'll open up to questions.

25          Anyone have any questions?

1 No questions?

2 MR. SERENO: I guess I've got one.

3 MS. ALLEN: Could you state your name,  
4 please?

5 MR. SERENO: Dave Sereno with the  
6 Repository Newspaper.

7 How far away did the contamination get?  
8 When you said the contamination has gone  
9 outside of the plant there, do you know how  
10 far? I notice that Ohio Water is not too far  
11 away. Is there any --

12 MR. SMITH: One of the Ohio Water wells  
13 was impacted. As far as distance, to be quite  
14 honest with you, I couldn't tell you how much  
15 in feet or how far away from the facility. I  
16 did include those maps in that handout to give  
17 a general idea. I know that there probably  
18 isn't a scale in there, I'm not sure, but to  
19 be quite honest with you, and I apologize, I  
20 can't tell you in feet how far away off site  
21 the contamination is.

22 MR. SERENO: But one of the Ohio wells was  
23 affected?

24 MR. SMITH: Yes.

25 MR. SERENO: When was that, do you know?

1 MR. SMITH: I believe pretty early on.  
2 Maybe about 1984 when they determined that.

3 MR. BURNS: We did abandon wells early on,  
4 but we also have other wells now that we are  
5 picking up some contamination, and we believe  
6 it to be derived from the Ekco site, but we  
7 have no proof of it.

8 MR. SMITH: Would you identify yourself,  
9 please?

10 MR. BURNS: Michael Burns, and I'm with  
11 Consumers Ohio Water Company. We are the  
12 former Ohio Water Company or Ohio Water  
13 service. It's our new name now.

14 MR. SERENO: Is there any danger to the  
15 customers or anything like that?

16 MR. BURNS: No. We are below MCL levels  
17 in all the contaminants that have been found.

18 MS. ALLEN: Any other questions?

19 Your name, sir?

20 MR. SEARS: My name is Dave Sears.

21 I notice that the shadow of the  
22 contamination looks like from the map it's  
23 going to the Newman Creek area, too.

24 Is it leeching in the creek or am I  
25 reading that map incorrectly?



1 MR. SMITH: One thing I can tell you is  
2 that I have looked at the record -- really I'm  
3 quite new at this, but I've looked through the  
4 administrative record, and flipping through  
5 it, I did see that during the investigation,  
6 sediments were sampled in the creek, and, once  
7 again, I'll give you my business card and I'll  
8 find the answer for you on that, but I know  
9 that sediments were tested in the creek to see  
10 if there is any impact. I am not sure if the  
11 groundwater in that area is discharging up  
12 through into the creek or not, but, yes, you  
13 certainly made a correct observation that the  
14 contamination goes up through to the point  
15 where the Newman Creek is.

16 MR. SEARS: The only question I have to  
17 ask too, the type of contamination that's on  
18 this site, does that lend itself to  
19 bioremediation?

20 MR. SMITH: Actually it does.  
21 Bioremediation is quite a bit different than  
22 what we are doing, although it uses some of  
23 the same components. When you bioremediate,  
24 you certainly put oxygen into the ground as  
25 well as nutrients for the natural microbes or

1 you can could possibly introduce microbes to  
2 the ground, and as far as this site's  
3 concerned, again, I'm just using my experience  
4 in this area, I'm not too sure why they did  
5 not decide to do this, other than the fact  
6 that you probably wouldn't want to be  
7 introducing a lot of those materials when your  
8 well is being used for drinking.

9 MR. SEARS: I was thinking in terms of  
10 feeding the microbes that were already on  
11 site.

12 MR. SMITH: Right. Exactly. That's one  
13 thing when I was looking through the Statement  
14 of Basis I noticed, that bioremediation wasn't  
15 even mentioned, but even just introducing the  
16 air to the air sparging would, you know,  
17 certainly encourage the microbes to do a lot  
18 more work on the bioremediation, so it will be  
19 a plus. I'm not too sure if it will be a  
20 tremendous plus, but it will be there, it will  
21 be something that's real.

22 MR. HARTSOCK: Terry Hartsock.

23 I was just curious that also looking at  
24 the map, is the underground flow in the  
25 bedrock or water level, is that toward the

1 site or away from the site? Does it flow  
2 toward the Tuscarawas River?

3 MR. SMITH: What we have, it's also found  
4 in the Statement of Basis, but I do have three  
5 maps here towards the end, and they're labeled  
6 figure 3-1, 3-2 and 3-3, and due to the  
7 pumping at the facility, the groundwater  
8 gradient is reversed backwards.

9 MR. HARTSOCK: Due to the pumping?

10 MR. SMITH: Right.

11 MR. HARTSOCK: So at this point, it's off  
12 site heading toward the creek toward the  
13 Tuscarawas River?

14 MR. SMITH: The groundwater?

15 MR. HARTSOCK: Yes.

16 MR. SMITH: To our knowledge, and based on  
17 the maps by the study, the area that they've  
18 indicated here is moving back towards the  
19 facility.

20 MR. SEARS: Is this being pulse pumped  
21 right now or continuously pumped?

22 MR. SMITH: To my knowledge, Ekco is using  
23 their two wells, W-1 and W-10, for their  
24 process water at the facility, and, again,  
25 I'll have to say from what I understand, they

1 may alternate between the two wells, so I  
2 guess in the sense that would be what the  
3 pulse would be, but I am not that familiar  
4 with their process at the facility, but they  
5 are using W-1 and W-10.

6 MR. SEARS: Well, this proposal to pulse  
7 pump then as part of the long-term corrective  
8 action, that would be designed to still  
9 maintain the water flow in the same direction?  
10 This would be cycled often enough to keep the  
11 water flowing?

12 MR. SMITH: Yes, absolutely. That would  
13 definitely be part of the whole remedy is just  
14 to make sure that migration ceases, and that  
15 in the sense migration comes back just to  
16 either stop it altogether or just pull it back  
17 towards the facility.

18 MR. HARTSOCK: You said the water was  
19 being used for the process flow.

20 Is it discharged to the sanitary sewer or  
21 hauled off site?

22 MR. SMITH: I believe it goes to an air  
23 stripper that's at the site. That's the  
24 impression that I have, because part of the  
25 proposed remedies states that the air stripper

1           that's there will continue to be used, and I  
2           believe that I've read that to be the  
3           processed water.

4           MR. HARTSOCK: That's what they're  
5           currently doing right now?

6           MR. SMITH: Right. Definitely. They're  
7           doing something about the problem even as we  
8           speak.

9           MS. ALLEN: Any other questions?

10          Okay. Any comments?

11          If we don't have any comments, I would  
12          like to thank you all for coming, and the  
13          meeting is adjourned.

14                               - - -

15          (Hearing concluded at 7:50 o'clock, p.m.)

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C E R T I F I C A T E

STATE OF OHIO, )  
 ) SS:  
SUMMIT COUNTY.)

I, Stephanie R. Dean, a Notary Public, certify that I attended the foregoing Hearing in its entirety, and that I wrote the same in stenotype, and that this is a true and correct transcript of my Stenotype notes.

Stephanie R. Dean  
Stephanie R. Dean, Notary Public  
in and for the State of Ohio.

My commission expires August 30, 2000.

— — —

# LAWYER'S NOTES

PAGE	LINE		
		P4 line 8: no "of"	P21: line 23 include, not conclude
		P5 line 17: Commit to answering All Questions	
		P6: line 7/B do not make sense	P22: line 1 → 5 I didn't say anything that falsified
		P8: line 16: (of) on	
		P9: line 4: (PS) RFI	
		P10: line 7 hydro stat ?	
		P10; line 7: hydro stratigraphic	
		P11: line 5: I said that ?!!	
		P11: line 12: keep: is really "de-"	
		P12: Carcinogen <u>5</u>	
		P13: line 13: <u>in</u> missing	
		P17: "channel zone" vadose zone - line 3	
		P17: line 6: wells not walls.	
		P17: line 13: in complete sentence	
		P18: line 3: <u>Aides</u> should be aids.	
		P18: line 5 added plus not add and plus	
		P19: line 14 (of) and	
		P20: line 7. installed, and add	